

Syllabus

PLATO Course Principles of Agriculture, Food, and Natural Resources, Semester A

Course Overview

This one-semester course is intended to help you familiarize yourself with various aspects of the agriculture, food science, and natural resources industries. This course has 15 lessons organized into 3 units, plus 3 Unit Activities. Each lesson contains one or more Lesson Activities.

This course covers basic concepts in the field of agriculture, food science, and natural resources. It also covers career opportunities in these fields and the academic skills and knowledge required for a successful career in agriscience.

You will submit the Unit Activity documents to your teacher, and you will grade your work on the Lesson Activities by comparing them with the given sample responses. The Unit Activities (submitted to the teacher) and the Lesson Activities (self-checked) are the major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson; the pre- and post-test questions that come at the beginning and end of the unit, respectively; and an end-of-semester test. All of these tests are a combination of simple multiple-choice questions and technology enhanced (TE) questions.

Course Goals

This course will help you meet the following goals:

- Learn about the evolution of the agriculture industry in the United States.
- Explore the positive work ethics, integrity, and self-representation skills needed in the agriculture industry.
- Examine the various aspects of soil systems.
- Explain the concepts of plant and crop sciences.
- Learn safety skills and precautions to be taken in the agriculture industry.
- Demonstrate reading and writing skills, speaking and listening skills, creativity, resourcefulness, and teamwork by contributing new ideas and assisting others in the workplace.

Prerequisite Skills

PLATO Course Principles of Agriculture, Food, and Natural Resources, Semester A has the following prerequisites:

- interest in the field of agriculture, food, and natural resources

- familiarity with the writing process and following guidelines

General Skills

To participate in this course, you should be able to do the following:

- Perform basic operations on a computer.
- Perform online research using various search engines and library databases.
- Communicate through email and participate in discussion boards.

For a complete list of the general skills required for participation in online courses, refer to the Prerequisites section of the Plato Student Orientation document, found at the beginning of this course.

Credit Value

PLATO Course Principles of Agriculture, Food, and Natural Resources, Semester A is a 0.5-credit course.

Course Materials

- notebook
- computer with an internet connection and speakers or headphones
- Microsoft Word or equivalent

Course Pacing Guide

This course description and pacing guide is intended to help you stay on schedule with your work. Note that your course instructor may modify the schedule to meet the specific needs of your class.

Unit 1: Introduction to Agriscience

Summary

In this unit, you will become familiar with the concepts of agriscience and sustainability. You will also learn about the work ethics, integrity, and self-representation skills necessary in the agricultural industry.

Day	Activity/Objective	Type
1 day: 1	Syllabus and Plato Student Orientation <i>Review the Plato Student Orientation and Course Syllabus at the beginning of this course.</i>	Course Orientation
5 days: 2–6	Introduction to Agricultural Science <i>Explain the evolution of the agriculture, food, and natural resources industry in the United States.</i>	Lesson
4 days: 7–10	Positive Work Ethics <i>Demonstrate a positive work ethic by coming to work every day on time, a willingness to take direction, and motivation to accomplish the task.</i>	Lesson
5 days: 11–15	Integrity <i>Demonstrate integrity by abiding by workplace policies and laws and demonstrating honesty and reliability.</i>	Lesson
4 days: 16–19	Self-Representation <i>Demonstrate positive self-representation skills by dressing appropriately and using language and manners suitable for the workplace.</i>	Lesson
5 days: 20–24	Agriculture and Sustainability <i>Explain sustainability and environmental management in the AFN industry.</i>	Lesson
1 day: 25	Para Jumble	Game
5 days: 26–30	Unit Activity/Threaded Discussion—Unit 1	Unit Activity

Day	Activity/Objective	Type
1 day: 31	Post-test—Unit 1	Assessment

Unit 2: Soil and Plant Science

Summary

In this unit, you will explore soil systems, including the types and characteristics of soil. You will also learn about plant and crop sciences. You will analyze the importance of safety skills and regulations in the agriculture industry. Finally, you will demonstrate teamwork and leadership skills essential for a successful career in the field of agriscience.

Day	Activity/Objective	Type
4 days: 32–35	Soil Systems <i>Explain the principles of soil formation, classification, improvement, and conservation.</i>	Lesson
4 days: 36–39	Plant Science <i>Explain plant structure, physiology, and reproduction.</i>	Lesson
4 days: 40–43	Crop Science <i>Discuss germination, growth, and breeding of plants of importance to the field of agriculture, food, and natural resources.</i>	Lesson
4 days: 44–47	Safety and Regulations <i>Explain hazards and safety precautions relating to the AFN industry.</i>	Lesson
4 days: 48–51	Teamwork <i>Demonstrate teamwork skills by contributing to the success of the team, assisting others, and requesting help when needed.</i>	Lesson
1 day: 52	Space Jumble	Game
5 days: 53–57	Unit Activity/Threaded Discussion—Unit 2	Unit Activity
1 day: 58	Post-test—Unit 2	Assessment

Unit 3: World Trade and Communication

Summary

In this unit, you will demonstrate effective reading, writing, speaking, and listening skills. You will also learn essential career skills, such as creativity, resourcefulness, and negotiation. Finally, you will discuss the role of agriculture in international markets.

Day	Activity/Objective	Type
4 days: 59–62	Reading and Writing <i>Demonstrate effective reading and writing skills by reading and interpreting workplace documents and writing clearly.</i>	Lesson
4 days: 63–66	Speaking and Listening <i>Demonstrate effective speaking and listening skills by communicating effectively with customers and employees and following directions.</i>	Lesson
5 days: 67–71	Creative Resourcefulness <i>Demonstrate creativity and resourcefulness by contributing new ideas and working with initiative.</i>	Lesson
5 days: 72–76	World Trade and Agriculture <i>Discuss international agriculture and world trade.</i>	Lesson
5 days: 77–81	Conflict Resolution <i>Demonstrate conflict-resolution skills by negotiating diplomatic solutions to interpersonal and workplace issues.</i>	Lesson
1 day: 82	Thwack-A-Mole	Game
5 days: 83–87	Unit Activity/Threaded Discussion—Unit 3	Unit Activity
1 day: 88	Post-test—Unit 3	Assessment
1 day: 89	Semester Review	
1 day: 90	End-of-Semester Test	Assessment